

Data represent the mean of triplicate determinations. The standard deviation of the intra-assay and interassays were less than 5% in all cases.

IN THE CLAIMS

Delete claims 10-15 and 26-87.

Please amend claims 5, 9, 16, 20, 21, 25, 92 and 98 as follows:

~~5~~ (Amended). A method of preventing or reducing aggregation of an aggregating protein or of disaggregating preaggregated aggregates of said aggregating protein, the method comprising administering to a subject that does not have a protein aggregation disease a therapeutically effective amount of an anti-aggregation molecule capable of binding to a bioactive native aggregating protein or an aggregated form of said aggregating protein with a high binding constant, and preventing or reducing aggregation of said aggregating protein or disaggregating aggregates of said aggregating protein, thereby preventing or reducing aggregation of said aggregating protein or disaggregating aggregates of said aggregating protein.

9 (Amended). The method of claim 5, wherein said aggregating protein is selected from the group consisting of carboxypeptidase A, amylin, bombesin, caerulein, cholecystokinin octapeptide, eledoisin, gastrin-related pentapeptide, gastrin tetrapeptide, somatostatin (reduced), substance P, luteinizing hormone releasing hormone, somatostatin N-Tyr, and β -amyloid.

16 (Amended). A pharmaceutical ^{formulation} composition for preventing and reducing aggregation of an aggregating protein and for disaggregating preaggregated aggregates of said aggregating protein, the pharmaceutical composition comprising a pharmaceutically acceptable carrier, and, as an active ingredient, a therapeutically effective amount of an anti-^{a genetically engineered} aggregation molecule capable of

binding to a bioactive native aggregating protein, or an aggregated form of said aggregating protein, with a high binding constant,

preventing and reducing aggregation of said aggregating protein, and

disaggregating aggregates of said aggregating protein.]

20 (Amended). The pharmaceutical composition of claim 16, wherein said aggregating protein is selected from the group consisting of carboxypeptidase A, amylin, bombesin,

antibody which binds to β -amyloid, or a fragment thereof, which binds to β -amyloid.

caerulein, cholecystokinin octapeptide, eledoisin, gastrin-related pentapeptide, gastrin tetrapeptide, somatostatin (reduced), substance P, luteinizing hormone releasing hormone, somatostatin N-Tyr and β -amyloid.

~~21~~ (Amended). A method of preventing or reducing aggregation of an aggregating protein or of disaggregating preaggregated aggregates of said aggregating protein, the method comprising administering to a subject that does not have a protein aggregation disease a therapeutically effective amount of an expression vector encoding, in an expressible form, an anti-aggregation molecule capable of

binding to a bioactive native aggregating protein or an aggregated form of said aggregating protein with a high binding constant, and

preventing or reducing aggregation of said aggregating protein or disaggregating aggregates of said aggregating protein,
thereby preventing or reducing aggregation of said aggregating protein or disaggregating aggregates of said aggregating protein.

25 (Amended). The method of claim 21, wherein said aggregating protein is selected from the group consisting of carboxypeptidase A, amylin, bombesin, caerulein, cholecystokinin octapeptide, eledoisin, gastrin-related

pentapeptide, gastrin tetrapeptide, somatostatin (reduced), substance P, luteinizing hormone releasing hormone, somatostatin N-Tyr and β -amyloid.

92 (Amended). The method of claim 88, wherein said aggregating protein is selected from the group consisting of carboxypeptidase A, amylin, bombesin, caerulein, cholecystokinin octapeptide, eledoisin, gastrin-related pentapeptide, gastrin tetrapeptide, somatostatin (reduced), substance P, luteinizing hormone releasing hormone, somatostatin N-Tyr and β -amyloid.

98 (Amended). The method of claim 94, wherein said aggregating protein is selected from the group consisting of carboxypeptidase A, amylin, bombesin, caerulein, cholecystokinin octapeptide, eledoisin, gastrin-related pentapeptide, gastrin tetrapeptide, somatostatin (reduced), substance P, luteinizing hormone releasing hormone, somatostatin N-Tyr and β -amyloid.

Please insert the following new claims 100-125 as follows:

100 (New). A method of treating a protein aggregation disease, comprising:

preparing an anti-aggregation molecule capable of binding to and preventing or reducing aggregation of, or disaggregating aggregation of a bioactive native aggregating

protein, or an aggregated form of said aggregating protein,
with a high binding constant, wherein said native aggregating
protein is selected from the group consisting of β -amyloid,
carboxypeptidase A, amylin, bombesin, caerulein,
cholecystokinin octapeptide, eledoisin, gastrin-related
pentapeptide, gastrin tetrapeptide, somatostatin (reduced),
substance P, luteinizing hormone releasing hormone, and
somatostatin N-Tyr; and

administering an effective amount of said anti-
aggregation molecule to a subject having a protein aggregation
disease associated with the aggregation of said aggregating
protein.

101 (New). A method in accordance with claim 100,
wherein said aggregating protein is β -amyloid and said subject
is one with Alzheimer's disease.

102 (New). A method in accordance with claim 100,
wherein said aggregating protein is carboxypeptidase A.

103 (New). A method in accordance with claim 100,
wherein said aggregating protein is amylin.

104 (New). A method in accordance with claim 100,
wherein said aggregating protein is bombesin.

105 (New). A method in accordance with claim 100,
wherein said aggregating protein is caerulein.

106 (New). A method in accordance with claim 100, wherein said aggregating protein is cholecystokinin octapeptide.

107 (New). A method for preventing or treating a protein aggregation disease, comprising:

creating an expression vector comprising, in an expressible form, a nucleic acid sequence encoding an anti-aggregation molecule that binds to and prevents or reduces aggregation of, or disaggregates aggregates of, a bioactive native aggregating protein or an aggregated form of said aggregating protein, wherein said aggregating protein is the cause of a disease and is selected from the group consisting of β -amyloid, carboxypeptidase A, amylin, bombesin, caerulein, cholecystokinin octapeptide, eledoisin, gastrin-related pentapeptide, gastrin tetrapeptide, somatostatin (reduced), substance P, luteinizing hormone releasing hormone, and somatostatin N-Tyr; and

administering an effective amount of said expression vector to a subject having a protein aggregation disease caused by said aggregating protein.

108 (New). A method in accordance with claim 107, wherein said aggregating protein is β -amyloid and said subject is one with Alzheimer's disease.

109 (New). A method in accordance with claim 107, wherein said aggregating protein is carboxypeptidase A.

110 (New). A method in accordance with claim 107, wherein said aggregating protein is amylin.

111 (New). A method in accordance with claim 107, wherein said aggregating protein is bombesin.

112 (New). A method in accordance with claim 107, wherein said aggregating protein is caerulein.

113 (New). A method in accordance with claim 107, wherein said aggregating protein is cholecystokinin octapeptide.

114 (New). A method in accordance with claim 9, wherein said aggregating protein is β -amyloid.

115 (New). A method in accordance with claim 9, wherein said aggregating protein is carboxypeptidase A.

116 (New). A method in accordance with claim 9, wherein said aggregating protein is amylin.

117 (New). A method in accordance with claim 9, wherein said aggregating protein is bombesin.

118 (New). A method in accordance with claim 9, wherein said aggregating protein is caerulein.

119 (New). A method in accordance with claim 9, wherein said aggregating protein is cholecystokinin octapeptide.

120 (New). A composition in accordance with claim 20, wherein said aggregating protein is β -amyloid.

121 (New). A composition in accordance with claim 20, wherein said aggregating protein is carboxypeptidase A.

122 (New). A composition in accordance with claim 20, wherein said aggregating protein is amylin.

123 (New). A composition in accordance with claim 20, wherein said aggregating protein is bombesin.

124 (New). A composition in accordance with claim 20, wherein said aggregating protein is caerulein.

125 (New). A composition in accordance with claim 20, wherein said aggregating protein is cholecystokinin octapeptide.

REMARKS

Claims 1-9, 16-25, and 88-125 presently appear in this case. No claim has been allowed, although it is apparent that none of the claims have been examined except for compliance with 35 U.S.C. §251 and in order to make a restriction requirement. The official action of June 29, 2001, has now been carefully studied. Reconsideration and allowance are hereby respectfully urged.